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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,335	08/20/2003	Johan M. Stoop		7986

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WILMINGTON, DE 19805

EXAMINER

PAGE, BRENT T

ART UNIT

PAPER NUMBER

1638

DATE MAILED: 01/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/644,335

Applicant(s)

STOOP, JOHAN M.

Examiner

Brent Page

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-26 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Election/Restrictions*

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-11, 13-17, and 23-24, drawn to a plant comprising a recombinant DNA molecule, said recombinant DNA molecule and a method for producing fructan by transforming a plant with said recombinant DNA molecule and extracting fructan, classified in class 800, subclass 287, for example.
- II. Claim 12, drawn to fructan, classified in class 127, subclass 30, for example.
- III. Claim 18, drawn to a method of screening transgenic maize tissue expressing embryo targeted genes, classified in class 435, subclass 430.1, for example.
- IV. Claims 19, 20, 25 and 26 drawn to a foodstuff comprising fructan, classified in class 426, subclass 534.
- V. Claims 21 and 22, drawn to an industrial product comprising fructan, classified in class 106, subclass 146.2, for example.

Inventions I and II, are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2)

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that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, Invention II can be made by a materially different process than the process claimed in Invention I. For example, fructan may be synthesized independently of the claimed transgenic plant by chemical synthesis. Furthermore, Invention I can be used to make a materially different product than the product claimed in Invention II. The claimed intact transgenic plant of Invention I may also be used directly as food, which is distinct from isolated fructan. These inventions are thereby distinct, and therefore restriction is proper.

Inventions I and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are unrelated. Invention I discloses a plant comprising a recombinant DNA molecule and a method for producing fructan, while Invention III discloses a method for screening maize tissue expressing embryo targeted genes. These inventions have different modes of operation as Invention III is directed to the screening of maize tissue and Invention I is directed to producing fructan. Furthermore, Invention I requires fructosyltransferase-encoding sequences, embryonic specific promoters, and vacuole targeting sequences, each not required by Invention III. Invention III requires maize type II callus, and methods for its preparation and transformation, each not required by Invention I.

Inventions I and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of

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operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are unrelated. Invention I discloses a plant comprising a recombinant DNA molecule and a method for producing fructan, while Invention IV discloses a foodstuff comprising fructan. Invention I requires plant transformation techniques involving molecular biology each of which is not required by Invention IV. Invention IV involves reagents and food processing methods, each not required by Invention I. Furthermore, the product claimed in Invention IV, foodstuffs comprising fructan, may be produced by mixing in chemically derived fructan with non-transgenic foodstuffs, for example. Thereby, Inventions I and IV are distinct and restriction is therefore proper.

Inventions I and V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are distinct from one another. Invention I requires plant transformation techniques involving molecular biology each of which is not required by Invention V. Invention V involves industrial reagents and processes of making industrial products, each not required by Invention I. Furthermore, the product claimed in Invention V, industrial products comprising fructan, may be produced by mixing in chemically derived fructan with non-transgenic industrial agents, for example. Thereby, Inventions I and IV are distinct and restriction is therefore proper.

Inventions II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of

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operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are not disclosed in the specification as capable of use together. Invention II discloses a fructan, while Invention III discloses a method of screening maize tissue for embryo targeted genes. Fructan is neither required nor used in the method for screening maize tissue for embryo targeted genes and therefore has a different mode of operation, a different function and a different effect than that of Invention III. Furthermore, Invention III involves maize tissue culture starting materials and methods each not required by Invention II. These inventions are thereby patentably distinct from one another and restriction is proper.

Inventions II and IV are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a polymer in its purified form and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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Inventions II and V are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a sugar substitute in its purified form and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Inventions III and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are not disclosed in the specification as capable of being used together. Invention III discloses a method of screening maize tissue for embryo targeted genes. Invention IV is a foodstuff comprising fructan that is not disclosed as being either a product or being used by the method of Invention III. The maize tissue culture and expression assay methods of Invention III are not required by Invention IV. Therefore Inventions III and IV are unrelated.

Inventions III and V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are not disclosed in the specification as capable of being used together. Invention III discloses a method of screening maize tissue for embryo targeted genes. Invention V discloses an industrial product comprising fructan that is not disclosed as being either a product or being used by the method of Invention III. The maize tissue culture and expression assay methods of Invention III are not required by Invention V. Therefore Inventions III and V are unrelated.

Inventions IV and V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions the different inventions are not disclosed in the specification as capable of being used together. Invention V discloses an industrial product comprising fructan, while Invention IV discloses a foodstuff comprising fructan. Industrial products and Food products are patentably distinct products neither of which requires the other for function. Furthermore, each involves reagents and processing steps not required by the other. Therefore Inventions IV and V are considered to have different modes of operation, different functions and different effects, whereby restriction is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject



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matter, fields of search, and different classification, restriction for examination purposes as indicated is proper.

A telephone call was made to Lori Beardell on 01/12/06 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent Page whose telephone number is (514)-272-5914. The examiner can normally be reached on Monday-Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on (571)-272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DAVID T. FOX  
PRIMARY EXAMINER  
GROUP 180-1638

